USB Extender Series

TWISTED PAIR EXTENDER FOR USB PERIPHERALS

- **Extends USB peripherals up to 450 feet (135 meters) on standard CAT 5/5e/6 or CAT 7 cable**
- **Supports USB 1.0, 1.1, and 2.0 standards with data transfer rates up to 480 Mbps**
- **Receiver features an integrated four port hub with 5 volts, 500mA available on each port**
- **Port Status LEDs**
- **Choice of tabletop and architectural form factors**
- **Form factors can be mixed and matched for optimum integration flexibility**
- **External universal power supply included**

The USB Extender enables USB peripheral devices to be remotely located up to 450 feet (135 meters) from the host computer. The extender consists of a transmitter and receiver set that are linked together using a single, standard CAT 5/5e/6 or CAT 7 cable. The USB Extender is available in three form factors that can be mixed-and-matched for optimum integration flexibility.

DESCRIPTION

The **USB Extender Series** enables USB peripheral devices to be remotely located up to 450 feet (135 meters) from the host computer. The extender consists of a transmitter and receiver set that are linked together using a single, standard CAT 5/5e/6 or CAT 7 cable. The receiver features a built-in, active four port hub that supplies 5 Volts, 500 mA to each port to power attached devices. This allows power-hungry peripherals such as smart phones, webcams, personal media players, and mass storage devices to be connected and powered or charged at the same time. The USB Extender Series is ideal for use in applications utilizing the Extron Annotator and remote touchscreen displays, as well as for applications that require the remote location of USB peripherals such as interactive whiteboards, keyboards, mice, and other HID - human interface devices.

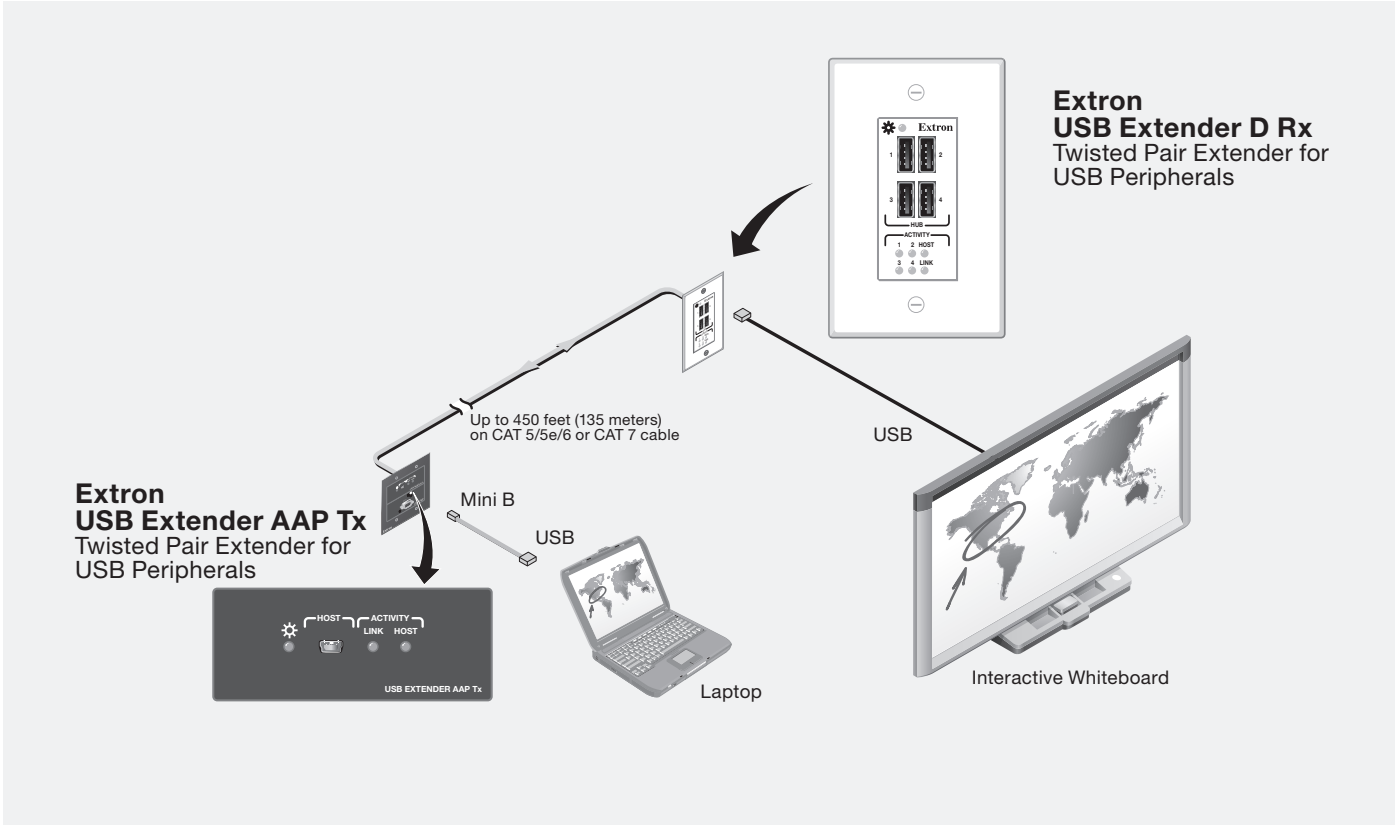
The USB Extender Series is available in three form factors that can be mixed and matched for optimum integration flexibility. The tabletop model is housed in a compact 1" quarter rack width metal enclosure, and is ideal for desktop, under desk, lectern, or rack mounting. The USB Extender AAP – Architectural Adapter Plate model, available in black and white, fits within a double-space AAP opening and provides a convenient and elegant architectural USB connectivity solution. The USB Extender Decora model is a white, one-gang faceplate that installs in a one-gang wall box.

All models feature an external universal power supply, replacement part # 70-775-01. Transmitters can also be powered directly from the USB host port.

FEATURES

- **Extends USB peripherals up to 450 feet (135 meters) on standard CAT 5/5e/6 or CAT 7 cable**
- **Supports USB 1.0, 1.1, and 2.0 standards with data transfer rates up to 480 Mbps** – Allows high speed transfer from thumb drives and other mass storage devices.
- **Receiver features an integrated four port hub with 5 Volts, 500 mA available on each port** – Allows simultaneous connection to multiple peripheral devices such as the Extron Annotator, mass storage devices, keyboards, mice, or other HID – Human Interface Devices.
- **Port Status LEDs** – provides visual indication of port activity for enumerated peripherals and all connected and active host devices.
- **Choice of tabletop and architectural form factors** – Available in a compact 1" rack-mountable metal enclosure, an AAP - Architectural Adapter Plate, and a 1-gang Decora-style wallplate for easy integration into a variety of environments.
- **Form factors can be mixed and matched for optimum integration flexibility**
- **External universal ENERGY STAR® qualified power supply included, replacement part # 70-775-01** – Provides worldwide compatibility, low power consumption, and reduced operating costs.

APPLICATION DIAGRAM



SPECIFICATIONS

USB

USB standards	USB 2.0, USB 1.1, USB 1.0 compatible
USB data rates	Low speed (1.5 Mbps), full speed (12 Mbps), high speed (480 Mbps)
Signal transmission distance	With CAT 5/5e/6/7 cable: 450' (135 m)

USB HOST — TX UNITS

Number/signal type	1 USB (supports USB 2.0, 1.1, 1.0 speeds)
Connectors	
USB Extender Tx	1 female USB type B
USB Extender AAP Tx, USB Extender D Tx	1 female mini USB type B

INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

Connectors	1 female RJ-45 per unit
Termination standards	TIA 568A or TIA 568B
Signal transmission distance	With CAT 5/5e/6/7 cable: 450' (135 m)

NOTE: The transmission distance varies depending on the type of cable used in the system.

USB HUB — RX UNITS

Number/signal type	(1) 4-port USB hub
Connectors	4 female USB type A

GENERAL

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1 A
Power input	
Transmitters	12 VDC, 0.4 A
Receivers	12 VDC, 1.0 A
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	
USB Extender Tx/Rx	Convection, no vents
USB Extender AAP Tx/Rx, USB Extender D Tx/Rx	Convection, vents on top
Mounting	
Rack mount	
USB Extender Tx/Rx	Yes, with optional rack shelf or rack mounting brackets
USB Extender AAP Tx/Rx, USB Extender D Tx/Rx	No
Furniture or wall mount	
USB Extender Tx/Rx	Yes, with optional mounting kits
USB Extender AAP Tx/Rx	Yes, with optional mounting frame or Extron product with AAP openings
USB Extender D Tx/Rx	Wall or furniture mountable in a 1 gang Decora®-style opening
Enclosure type	Metal
Enclosure dimensions	
USB Extender Tx/Rx	1.0" H x 4.3" W x 3.0" D (2.5 cm H x 10.9 cm W x 7.6 cm D) (Depth excludes connectors.)
USB Extender AAP Tx/Rx	
Faceplate	1.4" H x 3.5" W x 0.1" D (3.5 cm H x 8.9 cm W x 0.3 cm D) (double space AAP plate)
Device	1.4" H x 2.5" W x 1.4" D (3.5 cm H x 6.4 cm W x 3.6 cm D) (Depth excludes connectors and pigtail. Allow at least 1.6" (4.1 cm) depth in the wall or furniture.)
USB Extender D Tx/Rx	
Faceplate	2.6" H* x 1.3" W x 0.1" D (6.6 cm H* x 3.3 cm W x 0.3 cm D) (Fits the opening in a 1 gang Decora®-style wallplate.) *Overall height is 4.1" (10.4 cm) including mounting tabs.
Device	1.4" H x 2.5" W x 1.4" D (3.5 cm H x 6.4 cm W x 3.6 cm D) (Depth excludes connectors and pigtail. Allow at least 1.6" (4.1 cm) depth in the wall or furniture.)
Product weight	0.25 lbs (0.1 kg)
Shipping weight	1 lb (<1 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety	CE, c-UL, UL
EMI/EMC	CE, C-tick, FCC Class A, ICES, VCCI Class A
Environmental	Complies with the appropriate requirements of RoHS, WEEE
MTBF	30,000 hours
Warranty	3 years parts and labor

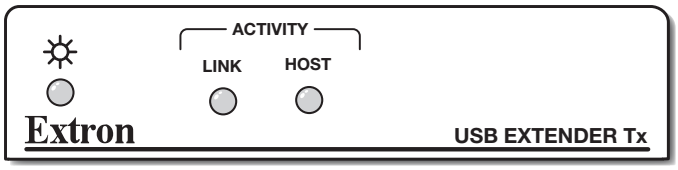
NOTE: All nominal levels are at ±10%.

Model	Version Description	Part number
USB Extender Tx	Transmitter	60-871-12
USB Extender Rx	Receiver	60-871-22
USB Extender AAP Tx	Transmitter - AAP Version - Black	60-870-12
USB Extender AAP Tx	Transmitter - AAP Version - White	60-870-13
USB Extender AAP Rx	Receiver - AAP Version - Black	60-870-22
USB Extender AAP Rx	Receiver - AAP Version - White	60-870-23
USB Extender D Tx	Transmitter - Decora Version - White	60-1252-13
USB Extender D Rx	Receiver - Decora Version - White	60-1252-23

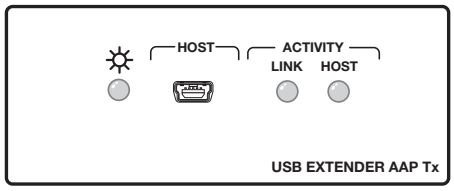
Optional Accessories

Model	Version Description	Part number
RSF 123	Rack Shelf Kit for 3.5 inch deep products	60-190-20
RSB 123	Basic Rack Shelf for 3.5 inch deep products	60-604-20
RSU 126	Universal Rack Shelf for 6 inch deep products	60-190-10
RSU 129	Universal Rack Shelf for 9.5 inch deep products	60-190-01
PMK 100	Pole Mount Kit for one 1/4 Rack Width product	70-217-01
PMK 200	Pole Mount Kit for 1/4 or 1/2 Rack Width products	70-212-01
PMK 300	Projector Mount Kit	70-374-03
PMK 350	Low profile Projector Mount Kit	70-563-03
ZipClip™ 200	Qty. 10 mounting clips and accessories	101-001-01

PANEL DRAWINGS

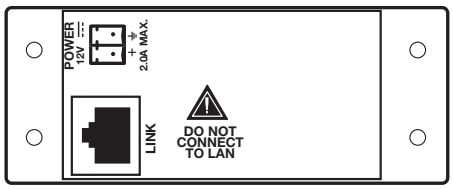


USB Extender Tx - Front

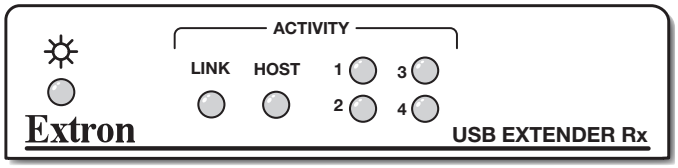


USB Extender AAP Tx - Front

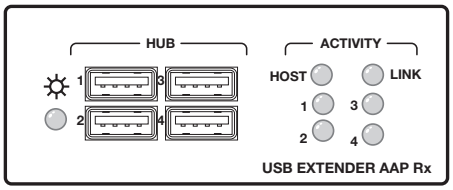
USB Extender Tx - Back



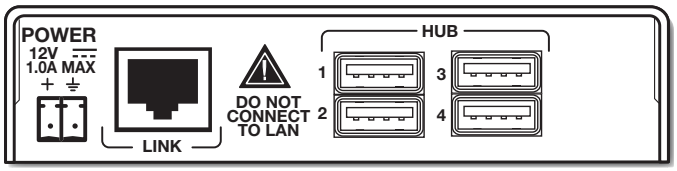
USB Extender AAP Tx - Back



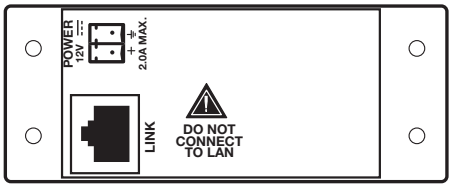
USB Extender Rx - Front



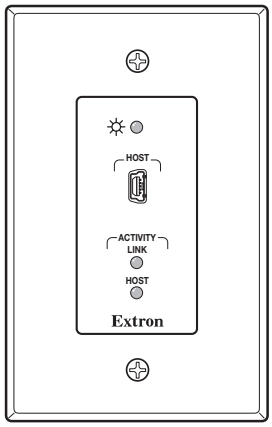
USB Extender AAP Rx - Front



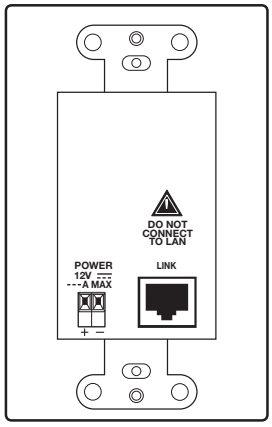
USB Extender Rx - Back



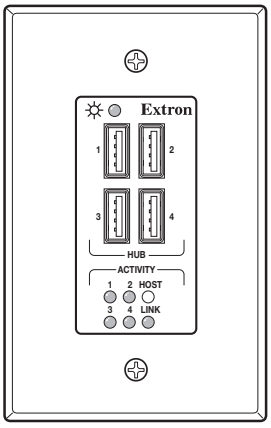
USB Extender AAP Rx - Back



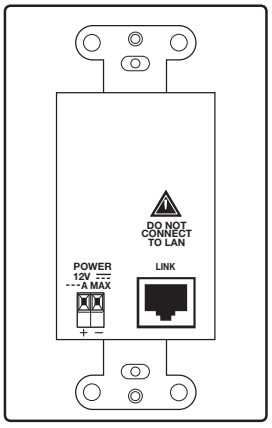
USB Extender D TX - Front



USB Extender D TX - Back



USB Extender D Rx - Front



USB Extender D Rx - Back

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